

Public Health Preparedness and Situational Awareness Report: #2020:3

Reporting for the week ending 01/25/20 (MMWR Week #4)

January 31st, 2020

CURRENT HOMELAND SECURITY THREAT LEVELS

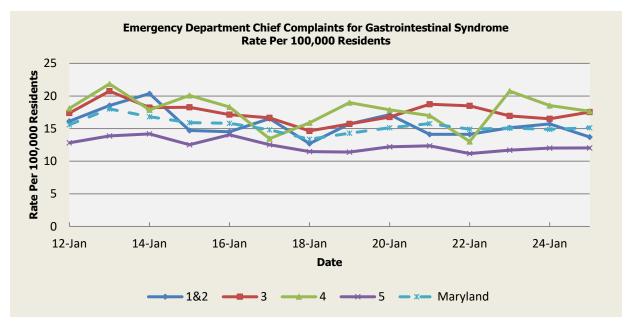
National: No Active Alerts

Maryland: Enhanced (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

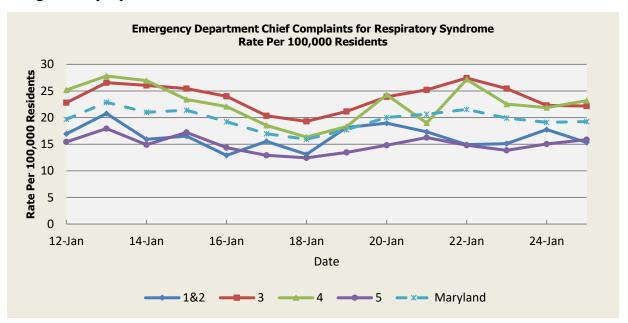


There was one (1) Gastrointestinal Syndrome outbreaks reported this week: one (1) outbreak of Gastroenteritis in an Assisted Living Facility (Region 1&2).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.31	15.04	15.93	10.25	13.13		
Median Rate*	13.31	14.87	15.46	10.22	13.05		

^{*} Per 100,000 Residents

Respiratory Syndrome

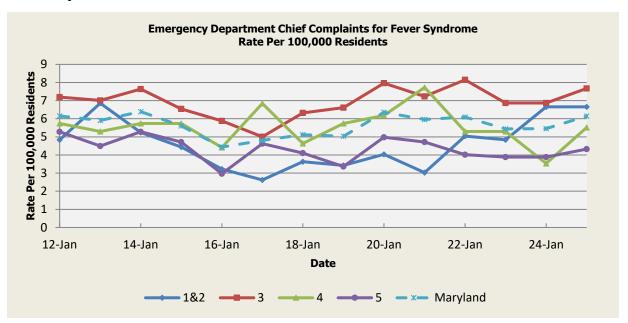


There were ten (10) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Influenza in a Group Home (Region 4), two (2) outbreaks of Influenza in Daycare Centers (Region 3 and Region 5), three (3) outbreaks of Influenza in Schools (Region 1&2 and Region 4), one (1) outbreak of Influenza / Pneumonia in a Nursing Home (Region 5), one (1) outbreak of ILI in a School (Region 4), one (1) outbreak of ILI /RSV in a Daycare Center (Region 3).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present							
n Region	1&2	3	4	5	Maryland			
n Rate*	12.62	14.75	15.10	9.98	12.77			
an Rate*	12.10	14.25	14.35	9.65	12.35			

* Per 100,000 Residents

Fever Syndrome

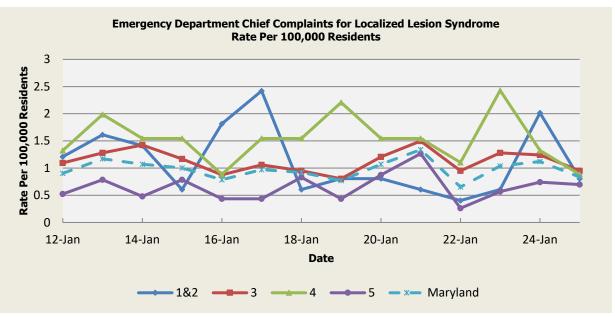


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.08	3.91	4.14	3.05	3.53	
Median Rate*	3.02	3.80	3.97	2.92	3.41	

*Per 100,000 Residents

Localized Lesion Syndrome

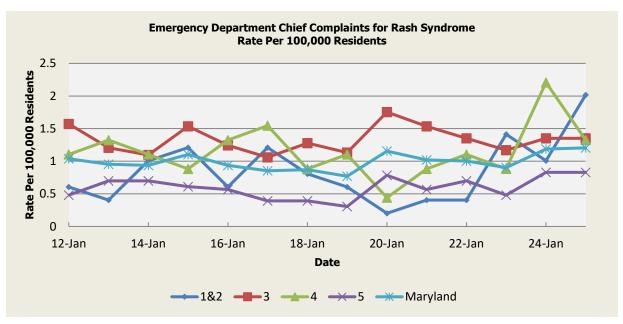


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2 3 4 5 Marylar						
Mean Rate*	1.17	1.77	2.03	0.90	1.41		
Median Rate*	1.01	1.72	1.99	0.87	1.36		

^{*} Per 100,000 Residents

Rash Syndrome

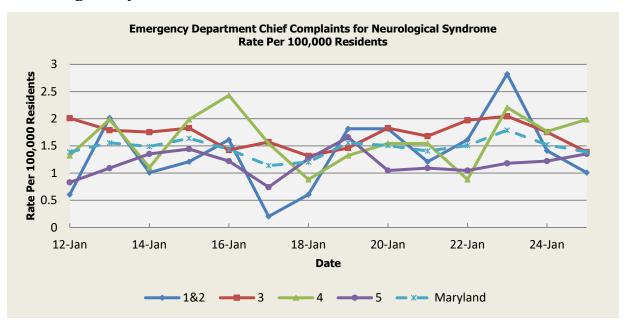


There was one (1) Rash Syndrome outbreak reported this week: one (1) outbreak of Hand Foot and Mouth Disease in a Daycare Center (Region 3).

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.25	1.66	1.75	0.97	1.37	
Median Rate*	1.21	1.61	1.77	0.92	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

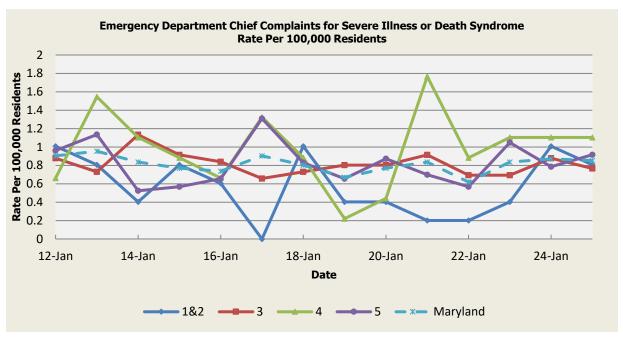


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.79	0.97	0.89	0.62	0.81		
Median Rate*	0.81	0.88	0.88	0.57	0.74		

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



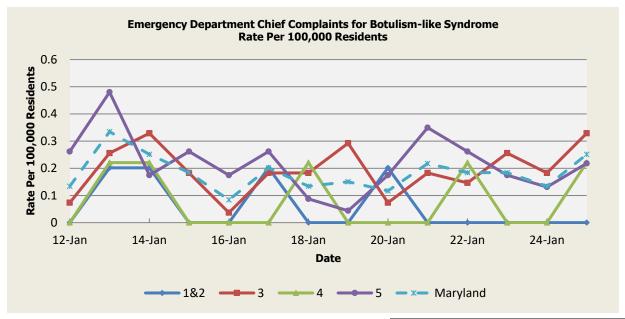
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	0.66	0.89	0.84	0.52	0.73			
Median Rate*	0.60	0.84	0.66	0.48	0.70			

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

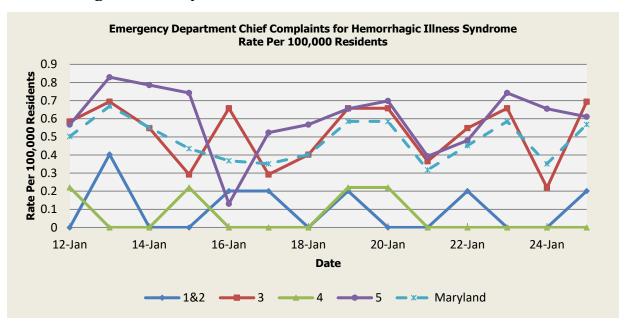


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 1/12 (Region 5), 1/13 (Regions 1&2,4,5), 1/14 (Regions 1&2,3,4,5), 1/15 (Region 5), 1/16 (Region 5), 1/17 (Regions 1&2,5), 1/18 (Region 4), 1/19 (Region 3), 1/20 (Regions 1&2,5), 1/21 (Region 5), 1/22 (Regions 3,5), 1/23 (Region 5), 1/25 (Regions 3,4,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.08	0.13	0.06	0.08	0.10		
Median Rate*	0.00	0.11	0.00	0.04	0.08		

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

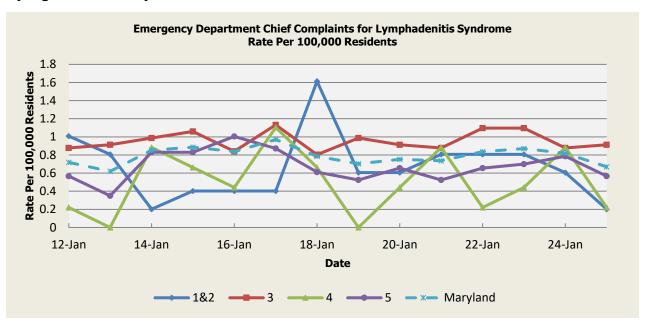


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 1/12 (Regions 3,4,5), 1/13 (Regions 1&2,3,5), 1/14 (Regions 3,5), 1/15 (Regions 4,5), 1/16 (Regions 1&2,3), 1/17 (Regions 1&2,5), 1/18 (Regions 3,5), 1/19 (Regions 1&2,3,4,5), 1/20 (Regions 3,4,5), 1/21 (Regions 3,5), 1/22 (Regions 1&2,3,5), 1/23 (Regions 3,5), 1/24 (Region 5), 1/25 (Regions 1&2,3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.04	0.16	0.04	0.14	0.13			
Median Rate*	0.00	0.11	0.00	0.09	0.08			

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 1/12 (Region 1&2), 1/13 (Regions 1&2), 1/14 (Regions 4,5), 1/15 (Region 5), 1/16 (Region 5), 1/17 (Regions 4,5), 1/18 (Regions 1&2), 1/21 (Regions 1&2,4), 1/22 (Region 1&2), 1/23 (Region 1&2), 1/24 (Regions 4,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.39	0.60	0.40	0.39	0.49			
Median Rate*	0.40	0.51	0.44	0.35	0.44			

^{*} Per 100,000 Residents

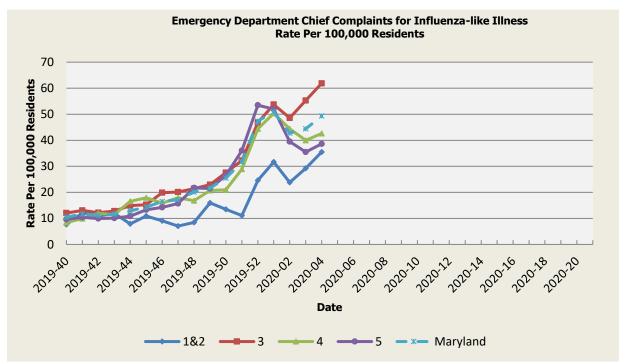
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.
(report continues on next page)

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2019 through May 2020). Seasonal Influenza activity for Week 4 was: High Activity and Widespread Geographic Activity.

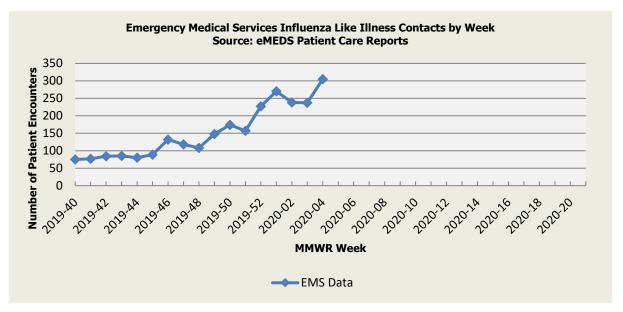
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.25	13.61	13.04	11.56	12.50	
Median Rate*	7.66	10.47	9.50	8.86	9.56	

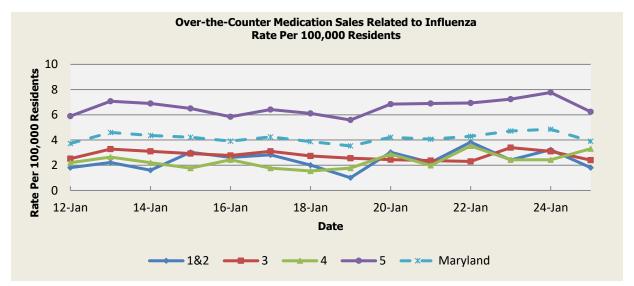
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

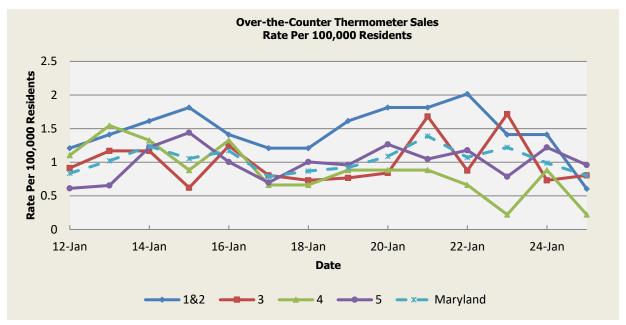


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.43	4.39	2.66	7.76	5.47
Median Rate*	2.82	3.51	2.21	7.03	4.74

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.87	2.73	2.18	3.63	3.04
Median Rate*	2.62	2.65	1.99	3.58	3.01

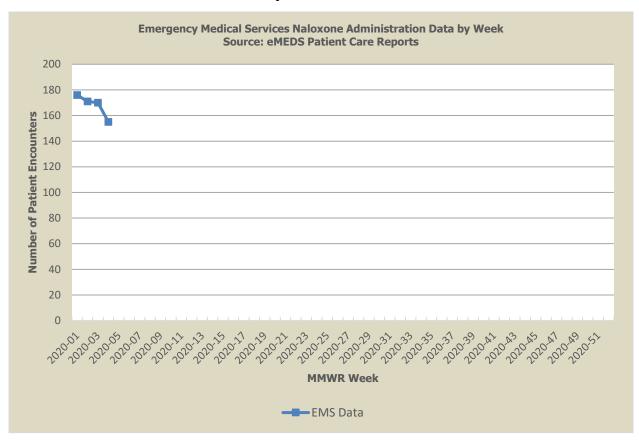
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

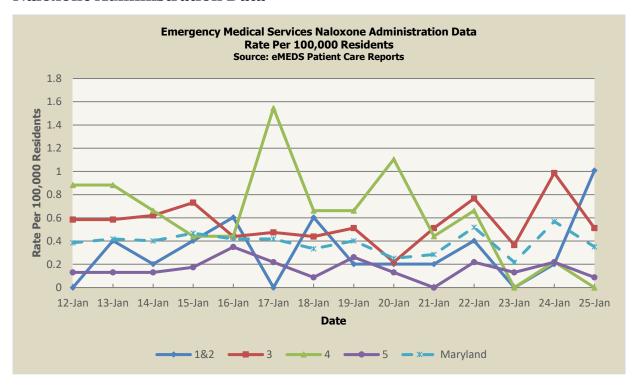
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 31st, 2020, the WHO-confirmed global total (2003-2020) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

AVIAN INFLUENZA (DENMARK), 30 Jan 2020, Affected population: On [29 Jan 2020], low pathogenic avian influenza H5 has been confirmed in a commercial poultry holding with organic laying hens. Read More: https://promedmail.org/promed-post/?id=6936337

AVIAN INFLUENZA (INDIA), 28 Jan 2020, Authorities in an eastern Indian state will start culling chickens and destroying eggs from Tuesday [28 Jan 2020] to contain a bird flu virus of the H5N1 strain, a government statement said on Monday [27 Jan 2020]. Read More: https://promedmail.org/promed-post/?id=6927574

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week

NATIONAL DISEASE REPORTS

RABIES (**MULTISTATE**), 31 Jan 2020, A kitten and 2 raccoons have tested positive for rabies in Cobb and Douglas counties, and some people and pets were exposed to the animals. Read More: https://promedmail.org/promed-post/?id=6943518

INTERNATIONAL DISEASE REPORTS

NOVEL CORONAVIRUS UPDATES (GLOBAL), 31 Jan 2020, Situation in numbers Globally: 9826 confirmed, China: 9720 confirmed, 15 238 suspected,1527 severe, 213 deaths Outside of China: 106 confirmed, 19 countries. Read More: https://promedmail.org/promed-post/?id=6940058

NOVEL CORONAVIRUS (**CHINA**), 26 Jan 2020, 2019-nCoV: early estimation of epidemiological parameters and epidemic predictions. Read More: https://promedmail.org/promed-post/?id=6918012

UNDIAGNOSED ILLNESS (NIGERIA), Jan 30, 2020An unknown illness has reportedly claimed the lives of 4 persons in the rural community of Oye-Obi in Obi local government area of Benue state. Read More: https://promedmail.org/promed-post/?id=6935838

LASSA FEVER (**NIGERIA**), 29 Jan 2020, Nigeria Center for Disease Control Lassa fever situation report [edited]. Summary of current week indicators [for week 4]. Read More: https://promedmail.org/promed-post/?id=6930926

EBOLA UPDATE (DEMOCRATIC REPUBLIC OF CONGO), 29 Jan 2020, The epidemiological situation of the Ebola virus disease in the provinces of North Kivu and Ituri dated 26 Jan 2020: Read More: https://promedmail.org/promed-post/?id=6928232

ANTHRAX (ZIMBABWE), 28 Jan 2020, More than 30 000 cattle have been vaccinated against anthrax in Bikita and Gutu districts in Masvingo Province following the outbreak of the disease recently, an official has said. Read More: https://promedmail.org/promed-post/?id=6926936

CRIMEAN-CONGO HEMORRHAGIC FEVER (**UGANDA**), 28 Jan 2020, Social media have reported a confirmed case of Crimean-Congo hemorrhagic fever [CCHF] in Kagadi (Uganda), in addition to 4 more suspect cases reported from the same district. Read More: https://promedmail.org/promed-post/?id=6924924

POLIOMYELITIS UPDATE (**PAKISTAN**), 26 Jan 2020, Two more polio cases have surfaced from Landikotal tehsil in Khyber tribal district, after which the number of reported cases in Khyber Pakhtunkhwa has reached 4 this year [2020]. Read More: https://promedmail.org/promed-post/?id=6919131

MERS-COV (**SAUDI ARABIA**), 25 Jan 2020, In the 2 days since the last update was prepared, there have been 3 additional newly confirmed cases posted on the Saudi MOH website. No outcomes were reported. Read More: https://promedmail.org/promed-post/?id=6917085

MARBURG VIRUS DISEASE (SIERRA LEONE), 25 Jan 2020, Scientists have detected Marburg virus in fruit bats in Sierra Leone, marking the 1st time the deadly virus has been found in West Africa. A total of 11 Egyptian rousette fruit bats tested positive for active Marburg virus infection. Read More: https://promedmail.org/promed-post/?id=6916732

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

<u>NOTE</u>: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 2	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

